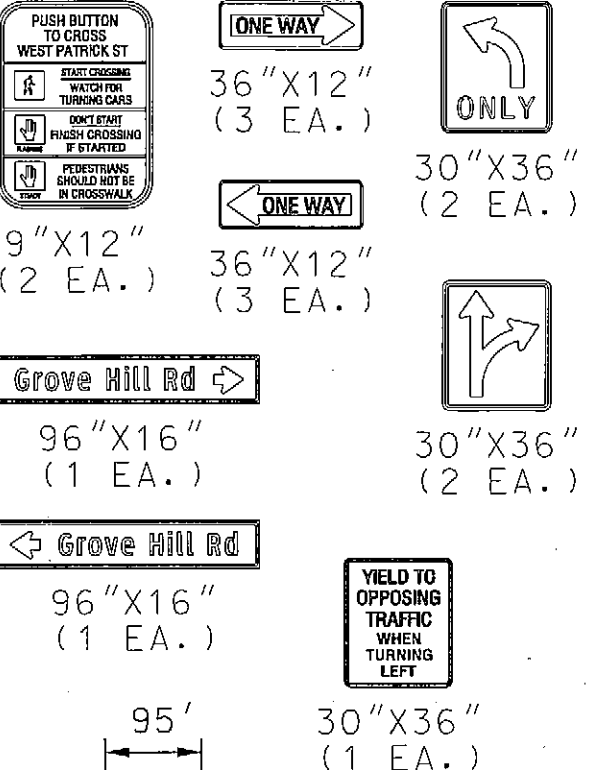
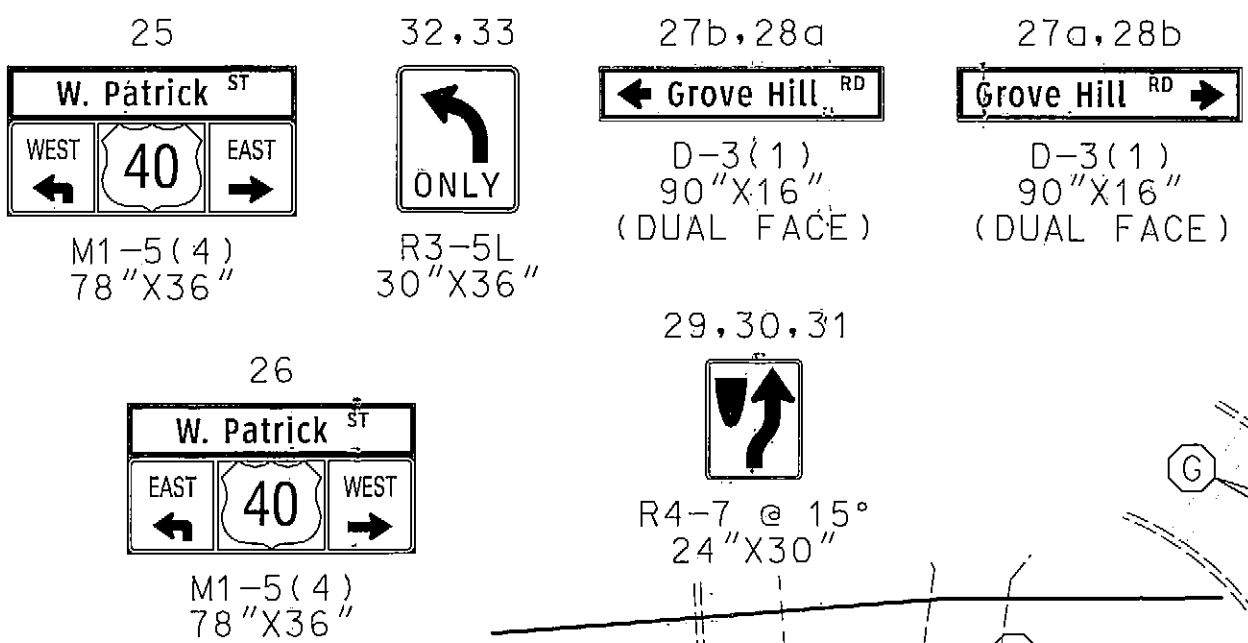


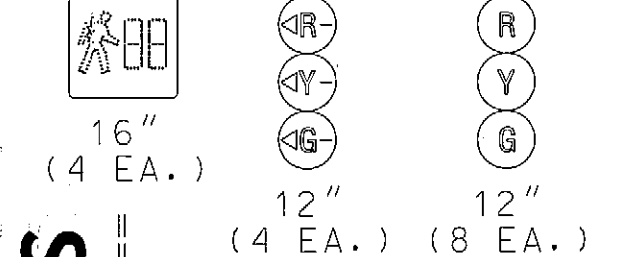
EXISTING SIGNS
TO BE REMOVED



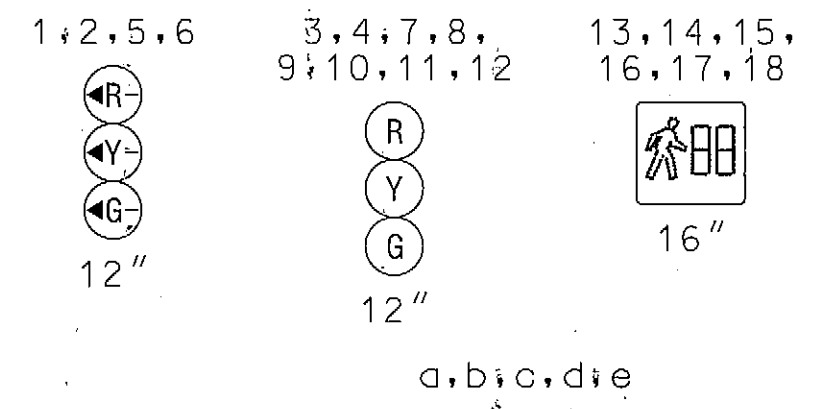
PROPOSED SIGNS



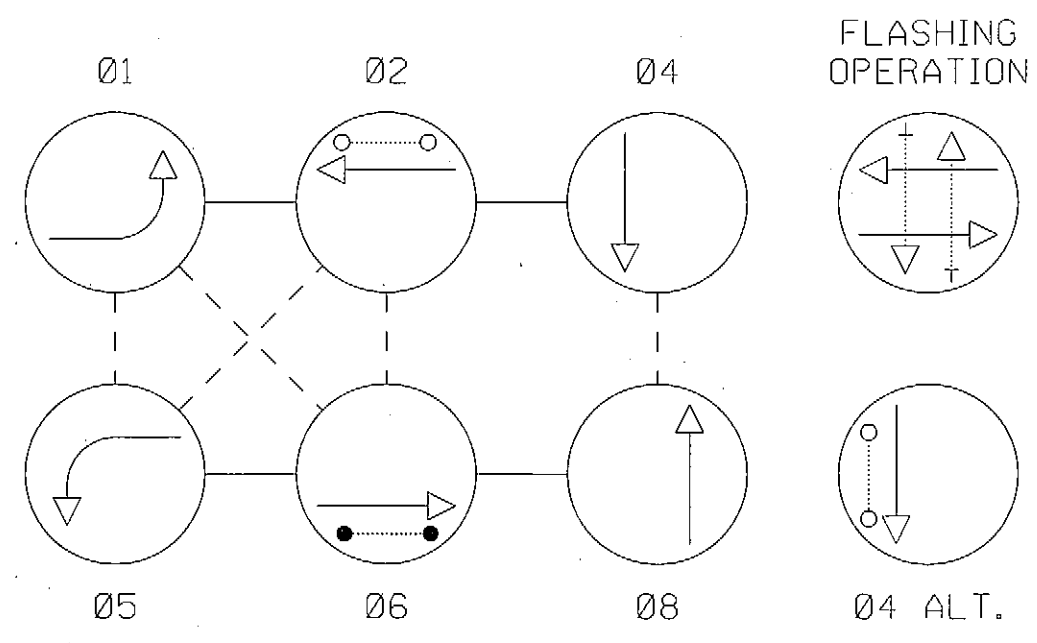
EXISTING SIGNALS
TO BE REMOVED



PROPOSED LED SIGNALS



NEMA PHASING

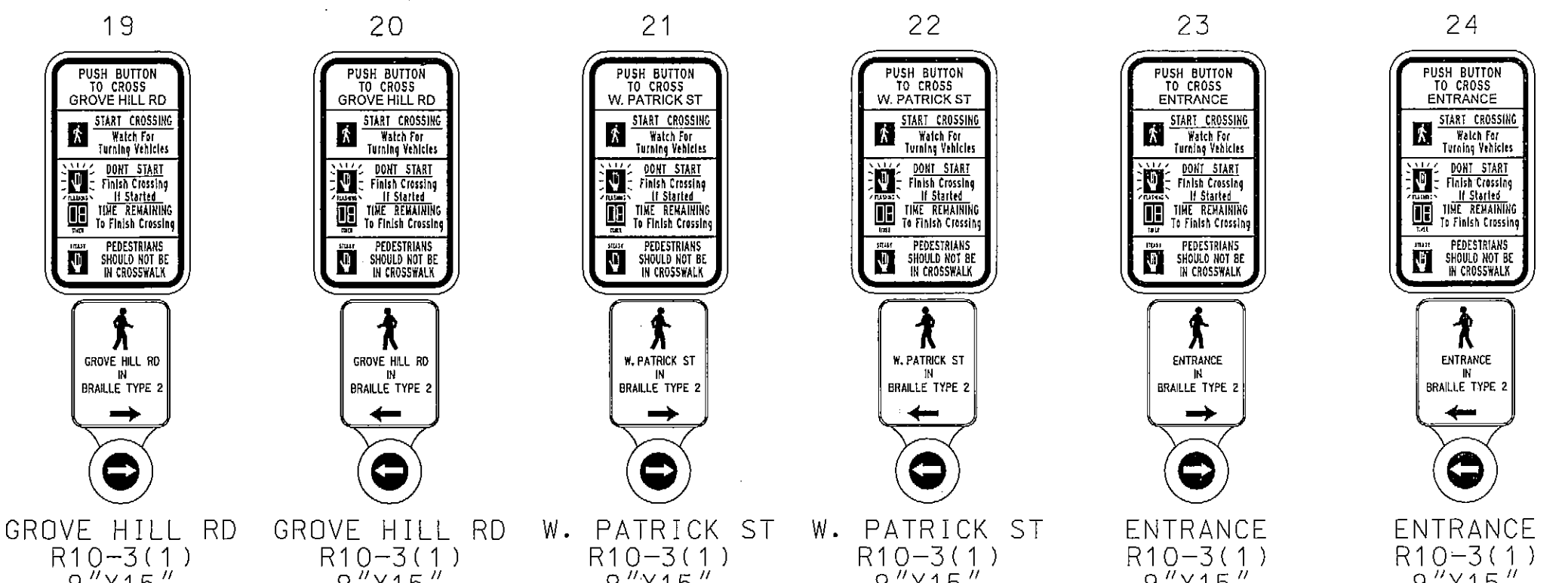


NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

US 40 (W. PATRICK ST)
WESTBOUND

US 40 (W. PATRICK ST)
EASTBOUND

PROPOSED ACCESSIBLE PUSHBUTTONS AND SIGNS

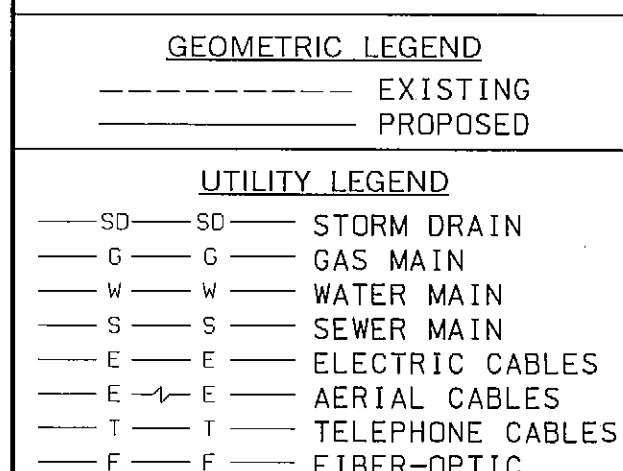


CONSTRUCTION DETAILS

- A. INSTALL 27 FT. TWIN MAST ARM POLE WITH 60 FT. AND 50 FT. MAST ARMS, LED SIGNAL HEADS, 15 FT. LIGHTING ARM WITH LED LUMINAIRE, IP-BASED VIDEO DETECTION CAMERAS AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.
- B. INSTALL 27 FT. MAST ARM POLE WITH 50 FT. MAST ARM, LED SIGNAL HEADS, 10 FT. LIGHTING ARM WITH LED LUMINAIRE, IP-BASED VIDEO DETECTION CAMERA AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.
- C. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH LED SIGNAL HEAD. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.
- D. INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH IP-BASED VIDEO DETECTION INTERFACE EQUIPMENT AND 2-WIRE APS CENTRAL CONTROL UNIT. NOTE: INSTALL 2-2 IN. AND 2-4 IN. CONDUIT BENDS IN BASE.
- E. REMOVE EXISTING STRAIN POLE, ASSOCIATED SIGNAL EQUIPMENT AND SIGNS. EXISTING ELECTRICAL SERVICE EQUIPMENT TO BE REMOVED BY UTILITY CO. CAP AND ABANDON CONDUITS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- F. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK) FOUNDATION SHALL BE FLUSH WITH FINAL SIDEWALK GRADE. REFER TO STANDARD MD 801.01-01 FOR FOUNDATION DETAILS. NOTE: INSTALL 1-2 IN. CONDUIT BEND IN POLE BASE.
- G. ABANDON EXISTING LOOP DETECTOR.
- H. PROPOSED VIDEO DETECTION ZONE.
- I. INSTALL ELECTRICAL HANDHOLE.
- J. REMOVE EXISTING PAVEMENT MARKING LINE.
- K. CAP AND ABANDON EXISTING CONDUIT.
- L. REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUIT(S). BACKFILL TO GRADE.
- M. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED. STUB AT UTILITY POLE FOR POWER FEED.
- N. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED FOR CARRIER PIPE.
- O. INSTALL 24 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE.
- P. INSTALL 12 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE.
- Q. USE EXISTING HANDHOLE. REPLACE FRAME AND COVER.
- R. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORT(S).
- S. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED.
- T. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- U. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- V. INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- W. INSTALL 100 AMP EMBEDDED METERED SERVICE PEDESTAL. NOTE: INSTALL 1-4 IN. AND 3-2 IN. CONDUIT BENDS IN BASE.
- X. DISCONNECT, PULLBACK AND REROUTE EXISTING INTERCONNECT CABLE.
- Y. REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER. CAP AND ABANDON EXISTING CONDUITS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- Z. EXISTING NORTHERN GUY WIRE ON UTILITY POLE NO. 85 SHALL BE RELOCATED AND REPLACED BY OTHERS.
- AA. REMOVE EXISTING PEDESTAL POLE, ASSOCIATED SIGNAL EQUIPMENT AND SIGNS. CAP AND ABANDON CONDUIT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- BB. REMOVE EXISTING STRAIN POLE, ASSOCIATED SIGNAL EQUIPMENT AND SIGNS. CAP AND ABANDON CONDUIT. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.

CONSTRUCTION DETAILS

- CC. INSTALL ELECTRICAL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO ROADWAY.
- DD. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH LEAD-IN CABLE. CENTER IN TRAVEL LANE.
- EE. INSTALL GROUND MOUNTED SIGN ON 1-4"X4" WOOD SIGN SUPPORT.
- FF. USE EXISTING CONDUIT.
- GG. USE EXISTING HANDHOLE.



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APPROVALS		REVISIONS	
TEAM LEADER		1	SIGNAL RECONSTRUCTION, 03-2013
ASST. ENV. CHIEF		2	INSTALL APS/CPS
DIVISION CHIEF		3	SHA NO. XX6505185-TJMS NO. L538
OFFICE DIRECTOR		4	INSTALL GPS
		5	SHA NO. AT3585185
		6	JWA CJS WRB DAB BRK TH

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 40 (W. PATRICK STREET) AT
GROVE HILL ROAD/FREDERICK TOWN
FREDERICK, MARYLAND
TRAFFIC SIGNAL PLAN
SCALE 1"=20' DATE _____ CONTRACT NO. FR3315171
DESIGNED BY _____ COUNTY FREDERICK
DRAWN BY S. BLOSS LOGMILE 10004011.92
CHECKED BY N. LEARY TMS NO. _____
FAP NO. _____ TOD NO. _____
TS NO. 3937B DRAWING SP-1 OF 2 SHEET NO. 1 OF 4

BY: WFW

TOD NO: XX650524
SHA NO: FR332854
US 40 @ Grove Hill Road

PLOTTED: Tuesday, March 19, 2013 AT 06:11 PM
FILE: \\sals03\2008\2008\08148\ltdoc\11\Task 118_US 40 Signals\CADD\L538 (GROVE HILL)\p5G-0001_US40@GroveHill.dgn